

Remarks

Claim changes

Claim 1 is amended to more clearly recite the claimed invention. Support for the amendments can be found, for instance, in FIGs 2-5 and in the specification at page 1, lines 9-12; page 4, lines 6-9; page 6, lines 2-4; and page 8, lines 26-27. Thus, no new matter has been added by these amendments.

Claim 2 is amended to be consistent with Claim 1 as amended. Thus, no new matter has been added by these amendments.

Claim 13 is amended to be consistent with Claim 1 as amended. Thus, no new matter has been added by these amendments.

Claim 18 is amended to more clearly recite the claimed invention. Support for the amendments can be found, for instance, in FIGs 2-5 and in the specification at page 1, lines 9-12; page 4, lines 6-9; page 6, lines 2-4; and page 8, lines 26-27. Thus, no new matter has been added by these amendments.

Claim 19 is amended to more clearly recite the claimed invention. Support for the amendments can be found, for instance, in FIGs 2-5 and in the specification at page 1, lines 9-12; page 4, lines 6-9; page 6, lines 2-4; and page 8, lines 26-27. Thus, no new matter has been added by these amendments.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment was made for the purpose of narrowing the scope of any claim, unless Applicant had argued herein that such amendment was made to distinguish over a particular reference or combination of references. Any remarks made herein with respect to a given claim or amendment are intended only in the context of that specific claim or amendment, and should not be applied to other claims, amendments, or aspects of Applicant's invention.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang
(USPN 6,212,562)

Applicant has amended the claims to clarify the invention. Applicant therefore respectfully requests reconsideration of the rejection of claims 1-20 under 35 U.S.C. § 102(a) as being clearly anticipated by Huang.

MPEP § 2131 provides: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicant respectfully submits that Huang does not anticipate, either expressly or inherently, each and every element as set forth in Claims 1-20.

Huang is directed to a processing node that includes a node-wide resource manager 14, which accepts certain inputs from a CPU scheduler 16, a disk I/O scheduler 18, a buffer manager 20, and a window/video manager 22 in order for the resource manager 14 to manage access, respectively, to a CPU resource, a disk I/O resource, a buffer memory resource, and a window/video processing resources (termed local resources) for the processing node to use in processing multiple sessions of multimedia applications. A session to be processed by the processing node is an internal system activity defined by an execution behavior of a continuous multimedia application, and the session can be characterized by three factors – timing, Quality of Service" QoS, and criticality. QoS specifies the degree of serviced quality expected for the underlying computer system (col. 4, lines 7-19, 40-42 and 57-58; col. 6, lines 3-5).

FIG. 5 illustrates an algorithm used by the none-wide resource manager to manage the local resources for processing of concurrent sessions by the processing node, wherein each session demands a certain amount of disk I/O bandwidth for storage access, memory space for buffering, CPU cycles for media data processing, and/or video processing bandwidth. The concurrent sessions can be either currently processed using the local

resources (i.e., executing session) or in a criticality-ordered waiting queue 30 and awaiting processing using the local resources (col. 5, lines 44-50 and 56-59; col. 6, lines 1-3). If the CPU resource 32, the disk I/O resource 34, the buffer resource 36, and/or the windows/video processing resource 38 have excess capacity in order to execute an additional session, the node-wide resource manager 14 dispatches a session from the criticality-ordered waiting queue 30 to respective queues 40, 42, 44 and 46 to be executed by the local resources (col. 6, lines 11-25).

If the local resources do not have excess capacity to execute an additional session, the node-wide resource managers 14 conducts an automatic QoS negotiation, wherein the QoS's of all of the executing sessions and of the additional session are shrunk. If this QoS shrinking frees up sufficient capacity of the local resources to permit execution of the additional session, then the additional session is admitted for execution. If there is still insufficient capacity after the QoS shrinking and if the additional session has a higher criticality than one or more of the executing sessions, if possible enough executing sessions are preempted until there is sufficient free capacity to execute the additional session, which is thereby admitted for execution. On the other hand, if the additional session cannot be admitted even with preemption, then no executing sessions are preempted and the additional session is not admitted for execution (col. 6, lines 26-48 and 53-57).

Based on the above, the elements of “middleware [that] provides an interface between at least one application running on a [] device and at least one network transport element external to the [] device” as set forth in independent Claims 1 and 18 are not found, either expressly or inherently described, in the Huang reference. On the contrary, Huang describes a node-wide resource manager that manages (based on local resource capacity) the provision of local resources for executing multiple multimedia sessions received from one or more multimedia applications. The resource manager interacts with the multimedia applications internal to a device and also with a CPU scheduler, disk I/O scheduler, buffer manager, and window/video manager also internal to the device to manage the local resources in order to manage which sessions will be executed by the processing node at any given point in time. There is no interfacing to at least one network transport element external to the device as is required by independent Claims 1 and 18. For similar reasons,

the elements of “a network interface to at least one network transport element external to the first device” as set forth in independent Claim 19 is not found, either expressly or inherently described, in the Huang reference.

The elements of “selecting a second behavior set from the group based upon said at least one trigger . . . [and operating] in accordance with said second behavior set” as set forth in independent Claims 1, 18 and 19 are not found, either expressly or inherently described, in the Huang reference, noting that a behavior set as set forth in the amended claims provides for at least one of a different set of routing rules and a different Quality of Service for traffic sent between at least one application and at least one network transport element that is external to a device. On the contrary, Huang describes receiving an additional session that is characterized by a QoS and determining whether the additional session can be executed by shrinking its QoS and those of already executing sessions or by preempting one or more already executing session. No behavior set and associated QoS (if provided by that particular behavior set) is selected for operating in accordance with the selected behavior set and associated QoS, as is required by the claims.

In view of the foregoing, Applicant respectfully submits that Huang does not anticipate, either expressly or inherently, each and every element as set forth in independent Claims 1, 18 and 19. Applicant therefore submits that the rejection of Claims 1, 18 and 19 under 35 USC 102(b) based on the Huang reference is improper and should be withdrawn, and requests that Claims 1, 18 and 19 now be passed to allowance.

Dependent Claims 2-17 and 20 depend from, and include all the limitations of independent Claims 1 and 19, which claims were shown to be allowable for the reasons given above. Therefore, Applicant respectfully submits that dependent Claims 2-17 and 20 are in proper condition for allowance and requests that Claims 2-17 and 20 now be passed to allowance.

The application is in condition for allowance. Such action is earnestly solicited by the Applicant. In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant’s attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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